Caltrans

Informed & Engaged Workforce

ROTATIONAL PROGRAMS
Cooperation of parties + Resources = Required components for successful program

MULTIMEDIA
Wiki Page
Digital Content Management
Library Resources

FACE-to-FACE: INDIVIDUAL
Cross Training; Peer Mentoring / Apprenticeship; Job Shadowing;
Formal Mentoring; On-the-Job Training (OJT)

FACE-to-FACE: GROUP
Expert Storytelling; Tailgate Meetings; In-House Workshops;
Education Committees; Lessons Learned

FORMAL TRAINING & MANUALS (Desk, Maintenance, etc.)
robust and targeted training; up-to-date documentation

COMMITMENT & TEAMWORK ~ buy in and staff 'championing'
STEWARDSHIP & SERVICE ~ knowledge management as a priority
MISSION & VISION ~ starts with exemplary leadership
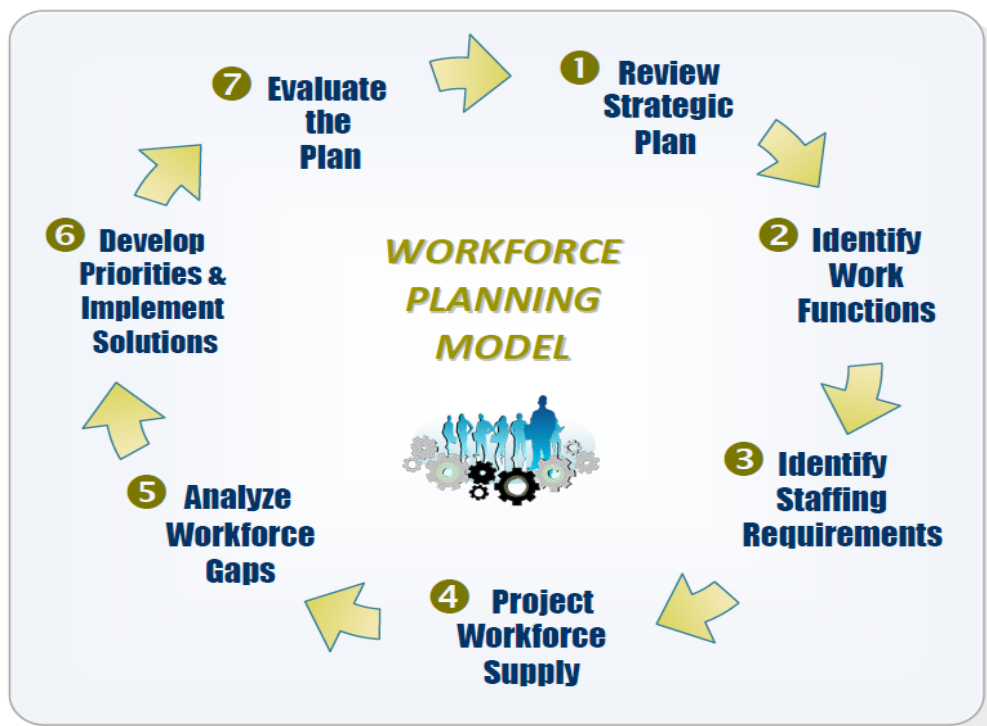
KNOWLEDGE TRANSFER
# GUIDEBOOK

Inform
&
Engage

KNOWLEDGE TRANSFER

What is knowledge transfer, and how can it help you? We must begin by first describing *workforce planning*, and the pivotal role knowledge transfer plays in ensuring the success of our workforce.

Workforce planning strives to have the right people in the right jobs at the right time. Succession planning focuses on having the right leadership in place, and is an important component of the overall workforce planning process. Caltrans has a Workforce Planning unit in the Division of Human Resources, (DHR) and has established strategic goals related to workforce and succession planning and knowledge transfer. This guidebook was developed by a Caltrans team as part of our strategic goal delivery. The techniques and tools described later are gleaned from industry best practices, and present several options for a supervisor to choose from, based on the needs of their work unit.

Currently, Caltrans has developed workforce plans for twelve occupational areas. Caltrans's workforce planning efforts focused first on Maintenance classes, and then on those classifications which feed into our CEA classification. The California Department of Human Resources' (CalHR) Seven-Step Workforce Planning Model describes a cyclical process, which includes steps for assessing and analyzing workforce gaps, developing priorities and implementing solutions.

WORKFORCE PLANNING MODEL

1. Review Strategic Plan
2. Identify Work Functions
3. Identify Staffing Requirements
4. Project Workforce Supply
5. Analyze Workforce Gaps
6. Develop Priorities & Implement Solutions
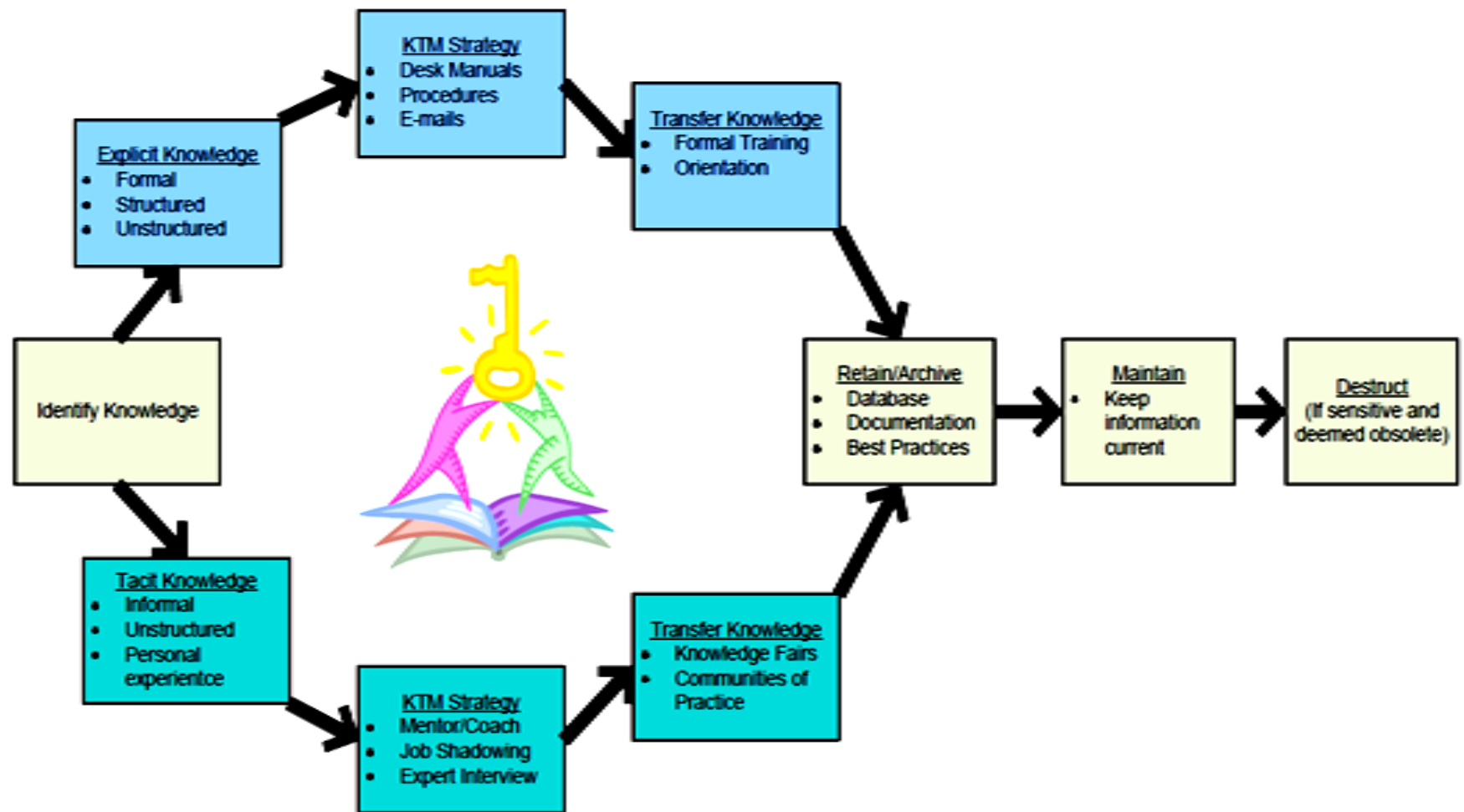7. Evaluate the Plan

As of July 2012, approximately **51% of the Department's workforce** – and **62% of the Department's Managers and Supervisors** – were at, or were within three years of, retirement age. As mid-level managers promote to CEAs, a ripple effect will be created at all levels of management and supervision.
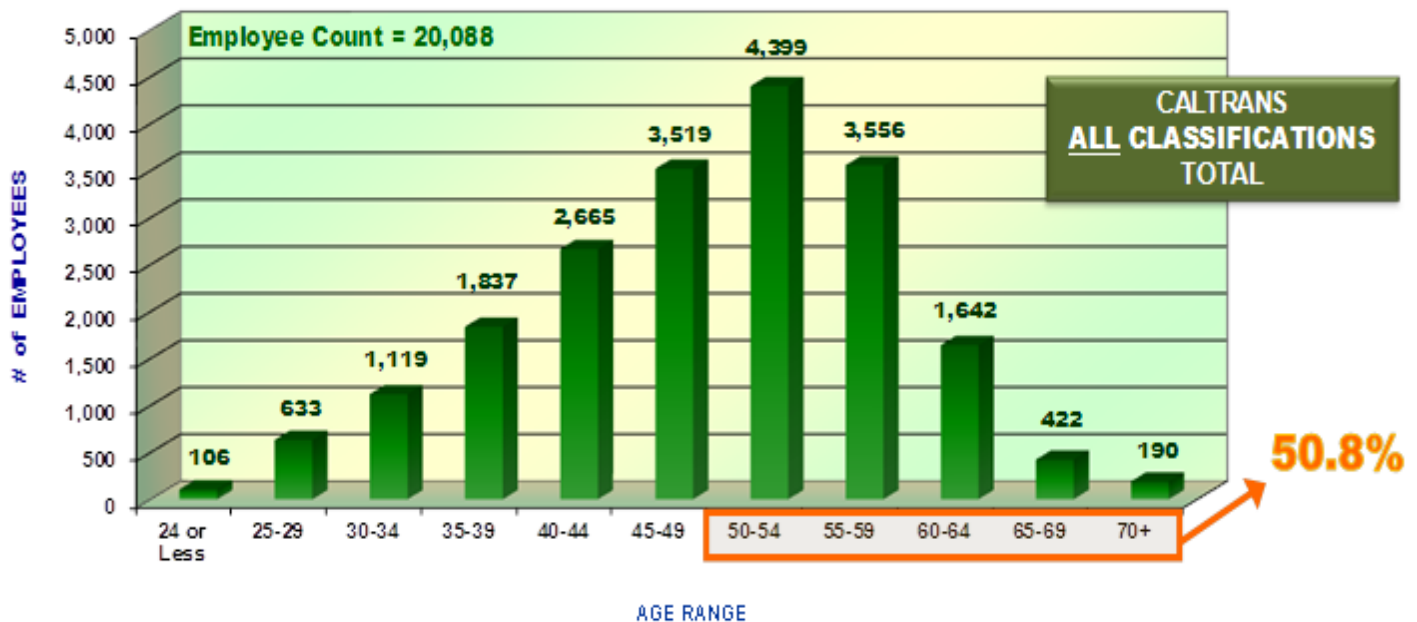
Moving forward, Caltrans must make a concerted effort to capture and impart the institutional knowledge within its ranks before staff leave via retirement. To address the looming gaps in workforce knowledge, common practices and techniques of *knowledge transfer* utilized by many public and private entities are summarized in this guidebook.

First, it is important to note the differences between the two types of knowledge. Knowledge can be *explicit*, which lends itself to transfer strategies such as formal desk manuals, procedures, and other structured processes. Knowledge can also be *tacit*, which lends itself to transfer strategies such as mentoring, coaching, communities of practice and the like. Explicit knowledge is more easily quantified and qualified, and can thus be more readily captured. Tacit knowledge, however, involves soft skills, personal characteristics, development of cooperative partnerships, and subjective situational judgments. As this type of knowledge is more intuitive in nature and derived from experience, it is less readily distilled and captured into orderly process structures. Since these characteristics are essential for leaders, we strongly suggest devoting more attention to the transferring of tacit knowledge.

Explicit Knowledge
- Formal
- Structured
- Unstructured

KTM Strategy
- Desk Manuals
- Procedures
- E-mails

Transfer Knowledge
- Formal Training
- Orientation

Identify Knowledge

Tacit Knowledge
- Informal
- Unstructured
- Personal experientce

KTM Strategy
- Mentor/Coach
- Job Shadowing
- Expert Interview

Transfer Knowledge
- Knowledge Fairs
- Communities of Practice

Retain/Archive
- Database
- Documentation
- Best Practices

Maintain
- Keep information current

Destruct
(If sensitive and deemed obsolete)

In order to determine what succession planning techniques our Department should focus on, we performed a needs assessment on what individual managers and supervisors are doing currently. In January 2012, a survey was circulated to Departmental managers and supervisors to determine what succession planning strategies are currently in use, what needs exist, and what knowledge they find to be the most critical to capture (explicit vs. tacit).

Survey results indicated that managers/supervisors currently rely heavily on the use of formal training and desk manuals for knowledge transfer. These methods are best used for transferring *explicit* information, and while they clearly provide a strong foundation for knowledge transfer, it only addresses a portion of the knowledge equation. It was our aim to identify various techniques and strategies that could better bring about the transfer of tacit knowledge.

Four Building Blocks

Caltrans developed a model for knowledge transfer that relies on a foundation of excellent leadership (predicated on the Department's mission, vision, and several goals) sound hiring practices, established techniques of manuals and formal training, while providing four dynamic strategies for specific *tacit knowledge* transfer.

> ➤ *Face-to-Face: Group* – This type of knowledge transfer focuses on one person transferring knowledge to a group of other people. This is a good technique to use when the knowledge is something that many people can benefit from, and it can be conveyed in sufficiently broad terms to be suitable for a lecture format. Examples include Expert Storytelling; Tailgate Meetings; In-House Workshops; Education Committees; Lessons Learned.

> ➤ *Face-to-Face: Individual* – This technique relies on a personal interaction between two people, with one person transferring the knowledge to the other. This technique is great if you have a multiple knowledge bases or techniques to transfer, or a great deal of specific technical detail.   Examples include Cross Training; Peer Mentoring / Apprenticeship; Job Shadowing; Formal Mentoring

> ➤ *Multimedia* – The world is full of useful technology, and this technique leverages it to store specific knowledge. If there is information that many people may want to readily access, this is a good strategy to store various types of knowledge, such as Wiki Page; Digital Content Management; Library Resources; Exit Interviews.

> ➤ *Rotational Programs* – Establishing rotation programs to allow employees to learn various functional areas in a discipline is a great tool to build knowledge.   If there are multiple areas of specialized skill in a work unit, the use of formal or informal rotation programs can build skills.   Be sure to check with Human Resources, Labor Relations and Budget Resources before starting a rotational assignment.

In the remainder of this guidebook, specific examples are provided for each technique, and how they could be introduced into your particular District/Division/Unit. *Best of luck in your knowledge transfer efforts!*

CT Knowledge Transfer
Foundational
Building
Blocks

Informed & Engaged Workforce

Tacit Knowledge Focus (left side)
Tacit Knowledge Focus (right side)

ROTATIONAL PROGRAMS
Cooperation of parties + Resources = Required components for successful program

MULTIMEDIA
Knowledge Maps; Library Resources; Wiki Pages

FACE-to-FACE: INDIVIDUAL
Cross Training; Job Shadowing; Peer Mentoring/Formal Mentoring; Structured On-the-Job Training (OJT); Transitional Training

FACE-to-FACE: GROUP
Boot Camp; Best Practices (Education Committees, Tailgate Meetings, Workshops); Communities of Practice; Critical Incident Reviews (Lessons Learned); Expert Storytelling; Knowledge Fairs

Explicit Knowledge (left side)
Explicit Knowledge (right side)

FORMAL TRAINING & MANUALS (Desk, Maintenance, etc.)
robust and targeted training; up-to-date documentation

COMMITMENT & TEAMWORK ~ buy in and staff 'championing'

STEWARDSHIP & SERVICE ~ knowledge management as a priority

MISSION & VISION ~ starts with exemplary leadership

Being a good leader starts HERE

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KNOWLEDGE TRANSFER TECHNIQUES & TOOLS

TACIT KNOWLEDGE FOCUS

CATEGORY – FACE-to-FACE: GROUP

- **Boot Camp**
- **Best Practices Meetings / Studies** (In-House Workshops; Education Committees; Tailgate Meetings)
- **Communities of Practice**
- **Critical Incident Reviews / Lessons Learned**
- **Expert Storytelling**
- **Knowledge Fairs**

BOOT CAMP

What	**Specific Topic:** A subject matter expert (SME) conducts a training session or sessions on a specific topic. Only one topic is covered and in a relatively short session (no longer than 4 hours). The topic may be an application or a unique aspect of it (e.g., a new approach to records management, a review or reconsideration of constructive intervention, a hands-on training to use or maintain a specific piece of equipment, etc.). The focus is on one topic only; and if something else arises during the session, it will be set aside for the SME to conduct future training sessions. **Multiple Topics**: For offices with multiple areas of operations, the Boot Camp can consist of training modules designed for knowledge that is applicable to: (1) all operational areas; and/or (2) specific or limited operational areas. User guides and mentor programs may be incorporated into these modules. New and existing staff shall go through sequences of training sessions depending on their assignments.
Why	Allows questions to be addressed for the benefit of all instead of the SME receiving similar individual questions over a period of time.
When	Refresher training is needed in a complex or evolving subject area
How	Determine what topic or topics need to be addressed. Identify SME(s) and develop presentation materials and/or modules for training session(s).
Do's & Don'ts	• Stay on point; guard against tangents • Session should not exceed a half day (4 hours)
Generic Example	**Blend of singular/multiple topics:** The Department of General Services (DGS) Building and Property Management Branch uses this strategy to combine knowledge transfer and staff development efforts for a number of classifications and functions.
Caltrans Examples	The Office of Discipline Services offers a supervisor refresher course on progressive discipline. The 4-hour class is well-paced and hits key refresher points, while providing helpful reference documents and contact listings. Various divisions and districts have used this course in a boot camp setting. Attendee reviews have said it was insightful, concise, and a very good use of their time.

BEST PRACTICES MEETINGS / STUDIES
(In-House Workshops; Education Committees; @ Tailgate Meetings)

What	Best practices meetings/studies look for different processes or systems to perform work that have had measurable success and effectiveness and are likely transferable. Best practices are found in a variety of ways; through meetings of similar functional groups, polling employees, or surveying for best practices.
Why	• Identifies practices that have worked in other organizations and may be transferable • Shares current practices and processes • Can spark innovation • To streamline a process or identify efficiencies • Can broaden networks and increase performer expertise
When	• New process, task, or competency needs to be developed • An existing process, task or competency needs modification • New process or success needs to be marketed internally or to other areas • Success depends on staying up-to-date; focus is on gathering info
How	Determine what knowledge needs to be shared. Identify sources of information to be accessed. Establish the meeting or study parameters, develop and implement project plan.
Do's & Don'ts	• Clarify the best practices to be researched and evaluated • Define scope and role of project and performers • Avoid vague or ambiguous goals and research topics
Generic Examples	Sample topics: Workforce Planning, Public Administration Practices, Office Safety, Government Accounting
Caltrans Examples	**Division of Engineering Services (DES) Education Committee**: This group shares the diversity within the Division of Engineering Services. The goal is to educate people of DES and other functional areas of Caltrans with presentations that include: • Any unique and unusual work done by DES • Large or challenging projects within different offices being undertaken • Having guest speakers from outside DES and Caltrans come and present interesting and unusual work • Research and present available videos, films, and slide shows on interesting, yet pertinent, timely topics.
Helpful Links / Resources	DES Education Committee Homepage

COMMUNITIES OF PRACTICE

What	A group of individuals sharing a common working practice over a period of time, though not part of a formally constituted work team.
Why	- Provides a sanctioned mechanism for sharing knowledge - Leads to improved network of contacts - Provides peer recognition and continuous learning - Provides a mechanism for sharing tacit knowledge
When	- Sharing tacit information is important to achieving better results - Knowledge is continuously gained and its sharing is beneficial to meeting organizational goals - Large cohorts are retiring or wave of new employees coming onboard
How	Determine the purpose of the group (e.g., solving everyday work problems, developing and disseminating best practices). Clarify roles and responsibilities and provide resources and support.
Do's & Don'ts	- Membership should be voluntary - Recruit those who are seen as experts and trusted as information sources - Management should not dictate action - Focus is on gathering information rather than making decisions or taking action
Generic Examples	Finance officer meetings, cross departmental IT meetings, Administrative managers network, MS Excel and Access user group
Caltrans Examples	**EFIS teams** – Separate teams of employees from various Divisions and Districts focusing on a specific EFIS improvement. **Leadership Development team** – Division of Engineering Services (DES) formed a team focusing on leadership development tools. The group was comprised of Labor Relations, Human Resources, Learning & Development, and DES employees. The team worked on a pilot program that focused on Caltrans leadership development.
Helpful Links / Resources	Communities of Practice: A Brief Introduction

CRITICAL INCIDENT REVIEWS / LESSONS LEARNED

What	By documenting, discussing, and/or deconstructing critical incidents and perspectives of the organization's most experienced performers, an organization can not only implement improvements, but also capture lessons for knowledge transfer.
Why	• Documents veteran performers' expertise and approach to problem solving • As critical incidents are captured, creates a more comprehensive set of lessons; continuously evolving • Allows for open discussions about what worked, what could be improved (document if appropriate) • Focuses on finding root cause or causes which are often process issues that result in performance issues
When	• Sharing individual knowledge and skill is critical • Situations are not encountered routinely; documentation of previous solutions and lessons learned is vital to knowledge transfer
How	Determine what constitutes a critical incident. Identify who should be involved in the review. Identify and capture the things that went well and could be improved so that team members are aware of, and can use, the broader team's learning in their future projects.
Do's & Don'ts	• Clearly document the details of the incident and how it was resolved • Pay special attention to identifying whether the incident requires a process fix or a developmental fix • Avoid brief, sketchy documentation that would make it difficult for a future performer to understand what happened • Be sure you can find and review the documentation when you need it
Generic Examples	Incidents might include: citizen complaints; exposure to hazardous materials; unsuccessful project; complex program implementation
Caltrans Examples	Earthquake damage to roads and bridges, damage to bridges due to auto accidents, road closures due to rock slides/weather, computer system implementation
Helpful Links / Resources	Florida Department of Transportation Critical Incident Review

EXPERT STORYTELLING / EXPERT INTERVIEWS

What	Expert storytelling/interviews are sessions where one or more people (who are considered experts in a particular subject, program, process, policy, etc.) meet with others to share their knowledge. The format of the sessions can range from an informal one-on-one meeting to a larger group session with a panel of experts. Sessions can be audio or videotaped or even transcribed if the subject is highly technical. The experts can come from within an organization or from an outside source.
Why	• It is a way of making tacit knowledge more explicit; expert can describe what was done and *why* it was done – providing context and explaining the judgment behind the action. • To allow the audience to connect the documented policies and procedures into real life situations.
When	• Ideally before an expert leaves the organization to ensure their knowledge transfers • Consistently before any significant employee turnover.
How	Identify the people (both experts and learners) and the knowledge you want to impart. Inform experts of the reasons for interview, what the focus will be, and who will be involved. If audience requires preparation for session, the expert can determine what background information or resource materials would be helpful. Additionally, it is important to seek audience input beforehand for areas of preferred focus. These, along with any specific questions, can be provided to the expert(s) in advance so he/she can be fully prepared.
Do's & Don'ts	• When a larger audience and/or panel of experts are involved, a facilitator should be utilized to keep the session focused and on time. • If audio or videotaping, equipment should be tested in advance to ensure both experts and learners can be heard on tape.
Generic Example	Division of Human Resources consults with subject matter experts (SMEs) on personnel related projects (i.e., job analyses, exam developments, etc.) to obtain their expertise and opinions on the variety of classifications within Caltrans.
Caltrans Examples	Division of Transportation Planning – Office of Workforce Development http://onramp.dot.ca.gov/hq/tpp/offices/owd/knowledge_interview.shtml
Helpful Links / Resources	WikiHow: How to Interview Experts Article: Using Mentoring & Storytelling to Transfer Knowledge in the Workplace

KNOWLEDGE FAIRS

What	An event that showcases information about an organization or a topic. Knowledge fairs may be one-time events hosted by a specific user group.
Why	• To share knowledge with a targeted audience or group • Far-reaching; can be used with the public, other state agencies, or within a department, division or program • To increase awareness of and knowledge about a program, topic area, or agency
When	Information can be shared easily via displays, brochures, etc.
How	Determine what knowledge needs to be shared and with whom it will be shared. Schedule fair, prepare documents and displays, market event, and clearly communicate purpose of the event.
Do's & Don'ts	• Clarify and communicate the goal or purpose of the fair • Avoid confusing a knowledge fair with a recruitment fair
Generic Examples	• State Call Center Fair, featuring all of the state's call centers • Public Protection Fair, featuring information from Public Safety, Corrections, Military and Veterans Affairs, Health and Social Services, etc.
Caltrans Examples	HQ Training Center utilized an open house to publicize its grand opening and provided tabletop displays of its courses as well as information about/features of the facility. Diversity Day The Division of Human Resources has open enrollment benefit education fairs.
Helpful Links / Resources	Knowledge Sharing Toolkit: Knowledge Fairs

CATEGORY – FACE-to-FACE: INDIVIDUAL

- **Cross-Training** (Position Backup)
- **Job Shadowing**
- **Mentoring Programs**
- **Structured On-The-Job Training** (OJT)
- **Transitional Training** ("Double Fill")

CROSS-TRAINING (Position Backup)

What	The training of one employee to do another's work.
Why	Such training creates a backup system in the event where an employee becomes unavailable or the position becomes vacant. Additionally, employees benefit from this as their skill sets are enhanced.
When	The backup assumes the cross-trained role, thus ensuring operations continue and program delays are minimized.
How	*Example:* Employee (A) is responsible for payroll while Employee (B) is responsible for accounts receivable/payable. To cross train these employees, have them take turns being the trainer. They can teach each other their procedures, approaches, and methodologies to complete those responsibilities. Another option is to have a supervisor conduct the training.
Do's & Don'ts	Identify which tasks are a priority and will be assumed by the position backup when one employee will be out of the office for an extended period of time, or the position is vacant, to prevent burnout of backup.
Caltrans Examples	All Human Resource Analysts in Division of Engineering Services (DES) know how to do one another's job when someone is out of the office. Each analyst has a back up and typically they are not out of office at the same time. They have access to each other's files, data, and contacts and when they are planning to be out of the office, current work assignments are left with their supervisor and backup is informed of what is outstanding.
Helpful Links / Resources	[Cross-Training & Staff Motivation Article (Hotel Industry)](#)

JOB SHADOWING

What	A less experienced performer is paired up with a veteran performer to transfer knowledge. The veteran is asked to share knowledge and provide hands-on practice in dealing with everyday problems in addition to the most difficult situations he/she has faced on the job.
Why	• Provides "real life" exposure to the job • Expands the individual's learning and knowledge of the organization • Could be offered to several individuals; expanding the organization's overall knowledge • Assists individual learning in making informed career decisions • Can be helpful in succession and workforce planning efforts
When	• To allow opportunity for individual(s) to learn about a particular occupation • Exposure to the job itself can enhance knowledge transfer, particularly with effective coaching
How	Determine what knowledge needs to be shared. Identify veteran performer who possesses competency in coaching and knowledge transfer. Identify individual(s) who will shadow veteran performer. Establish timeline and knowledge transfer goals.
Do's & Don'ts	• Job Shadowing should not be used as a comprehensive on-the-job training program • Clarify roles and expectations up front • Select veteran performers who have both competency in coaching and hands-on experience • Avoid pairing less-experienced performers with slightly more experienced performers • Use debriefing sessions for coaching opportunities • Discuss educational requirements; the career ladder for the job and related positions
Generic Example	Attending strategic planning meetings with veteran performer; observing veteran performer for a day on the job
Caltrans Examples	A Deputy District Director of Maintenance (DDDM) brings her manager(s) to meetings to expose them to Departmental policy, processes and potential impacts, such as asset management, budgetary processes changes, training and development, etc.
Helpful Links / Resources	Learning & Development Office: Job Shadowing PDF

MENTORING PROGRAMS

What	Mentors provide coaching to mentees to assist in achieving professional goals, expand organizational knowledge, and create well-rounded employees that are more likely to stay within an organization.
Why	• Transfer valuable knowledge, skills, and resources for specific situations and developmental needs • Effective method for transferring organizational culture and norms • Establishes reliable experienced contact outside supervisory chain • Develops higher level of proficiency • Guides employees in achieving career goals • Improves productivity and job satisfaction • Enhances leadership competencies of CA state government employees • Aids in retaining high potential employees
When	• An employee expresses interest on how to excel in their career and attain the next level of excellence. • An employee will benefit from a relationship with someone (other than a performance evaluator) who will listen, question, encourage, assess and help them develop greater professional skills in order to achieve personal and career goals. • To create a culture of learning, sharing, and networking in California state government.
How	Mentee reviews Caltrans Mentoring Handbook. Reflects on professional development needs and completes the requisite worksheets prior to identifying Mentor. Determines what knowledge or competency needs to be developed. Identifies experienced mentor with coaching and knowledge transfer skills. Mentor can be preselected or from a list maintained in the division. Allow mentor and mentee to establish mentoring contract.
Do's & Don'ts	• Participation in mentor program should be voluntary, for both the mentor and the mentee. • Specific competency goals, objectives, and developmental needs should be identified and agreed upon at the beginning. • Mentee's supervisor should not be involved in the mentoring program, beyond giving approval for mentoring relationship(s) at the outset and noting the participation in the mentee's IDP. • Mentor and mentee should respect confidentiality of their mentoring sessions. • Mentee should recognize and respect the gift of the Mentor's time. • If at any time either party would like to end the relationship, they should be able to do so without concern. • Be cognizant of potential for conflicting information between mentor and supervisor; when it involves task-related items, supervisor instruction takes precedence.
Caltrans Examples	• An employee expresses interest of promoting while developing a five-year plan with their supervisor during an IDP meeting. • An employee becomes complacent in their job and needs a better understanding of career options that may be available to them. • An employee who wants to know how their job contributes to organizational goals.
Helpful Links / Resources	Learning & Development Office: Mentoring Main Page

STRUCTURED ON THE JOB TRAINING (OJT)

What	Instruction takes place on the actual job site, usually involving learning skills or procedures in a hands-on manner following a defined structured learning process.
Why	• Provides less experienced performer, or trainee, with real-job experience • Allows work of agency to be accomplished during training
When	• Tasks have developed procedures and aids for teaching • Real-life experience needs to be developed
How	Determine what knowledge needs to be shared. Develop step-by-step instructions. Identify trainer. Establish learning objectives and timeline for completion.
Do's & Don'ts	• Use good performers who can also teach and coach • Provide training and resources for those coaching • Analyze the job, break into tasks, and develop procedures and aids for teaching • Encourage the trainee to ask questions • Follow this model: *Describe | Describe & Demonstrate | Trainee Performs | Trainee Describes & Performs | Trainee Practices* • Tell trainee where to go for help • Follow-up with trainee • Avoid assumptions about the depth, level, and scope of knowledge already possessed by the trainee
Generic Examples	Data entry into program database; writing monthly status reports; processing employee payroll
Caltrans Examples	A new analyst is hired and teamed with an experience analyst in the program. They work together on assignments. The experienced employees might review spreadsheets, share contact information, show them how to use Lotus notes, introduce them to the people they will be working with, show them routine reports, demonstrate specific procedures or processes, etc.
Helpful Links / Resources	Article: *Unraveling 5 Myths of OJT* Tips for Structured On The Job Training

TRANSITIONAL TRAINING *(exceptional cases only)*

What	Transitional training - or "double fill" - employs the experienced performer and the less experienced performer in the *same position simultaneously*. Usually for a set period of time.
Why	- Transfer an established portion of knowledge - Can reduce amount of supervisor's training time - Can provide intense, one-on-one training in all situations encountered on the job
When	- Position is highly complex/specialized or involves senior management - Budget allows for double fill - Departing employee gives enough advance notice to allow for recruitment, selection and appointment to happen prior to his/her leaving the job
How	Determine what knowledge needs to be shared. Develop timeline and action plan to assure knowledge is transferred in the time allotted for the double fill.
Do's & Don'ts	- The action plan and timeline should be achievable and detailed - Knowledge transfer alternatives should be available in case there are unforeseen circumstances (e.g., separating employee leaves early) - Avoid vague, ambiguous descriptions of knowledge to be transferred - Clarify roles up front - Preferable if experience level of the two employees is not too far apart, so as to focus on transfer of experiences, rather than provide standard training
Generic Examples	Two week overlap to focus on program specific information. More routine operations and/or general office matters will be trained after double fill time is completed and by a different experienced performer.
Caltrans Examples	A long time Caltrans manager in a Facility Processes position was going to retire. Peer supervisors were not experienced in this area. A new supervisor was hired to work with the current supervisor for 1 or 2 months. Cross training and knowledge transfer had an opportunity to occur.

CATEGORY – MULTIMEDIA

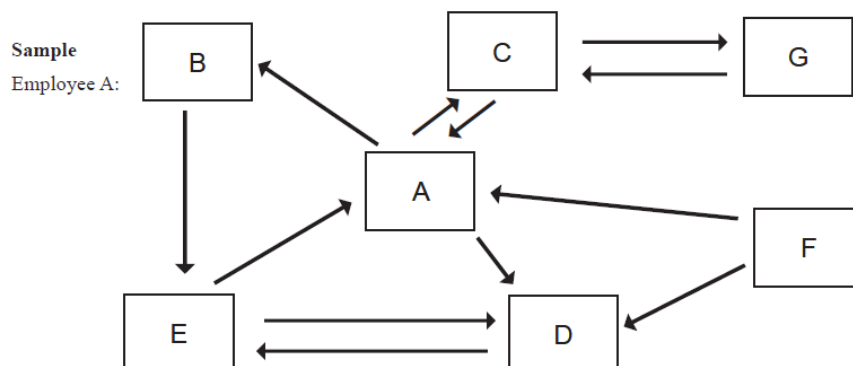- **Expert Interviews / Expert Storytelling**
- **Knowledge Maps**
- **Wiki**

EXPERT STORYTELLING / EXPERT INTERVIEWS

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When	• Ideally before an expert leaves the organization to ensure their knowledge transfers • After significant employee turnover
How	Identify the people (both experts and learners) and knowledge you want to impart. Inform experts of the reasons for interview, what the focus will be, and who will be involved. If audience requires preparation for session, the expert can determine what background information or resource materials would be helpful. Additionally, it is important to seek audience input beforehand for areas of preferred focus. These, along with any specific questions, can be provided to the expert(s) in advance so he/she can be fully prepared.
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Helpful Links / Resources	WikiHow: How to Interview Experts Article: Using Mentoring & Storytelling to Transfer Knowledge in the Workplace

KNOWLEDGE MAPS

What	An effort to discover the location, form, ownership, value and use of knowledge. To learn about people's expertise; to find opportunities to make better use of existing knowledge in the organization; and to identify barriers to knowledge flow.
Why	• Highlights areas of specialty knowledge and expertise • Encourages better use of information and knowledge and reduces "reinventing the wheel" • Saves time searching for experts in a particular area • Saves the time of experts by helping others locate needed information quickly
When	• Learning can be enhanced by graphically representing available resources and when to use them • For more complex situations; the map can help less experienced performers learn who and when to use resources
How	Determine what knowledge needs to be shared. Interview experts to identify the resources they use and construct knowledge map. Educate less experienced performers on how to use the map (link to document repository).
Do's & Don'ts	• Clarify the type of knowledge transferred at each point in the map • Avoid using the map as the answer to a situation • Clearly describe the parameters around the map's use (e.g., only in certain situations)
Generic Examples	Your own Personal Map – starts with a "node" representing yourself, map the people with whom you share information, both internally and externally. Try to represent whether you are only receiving information, only giving information, or whether it is a two-way exchange.
Caltrans Examples	Knowledge Maps were employed during the purchasing phase of the EFIS system. Maps were drawn so that employees could visualize the process.
Helpful Links / Resources	Knowledge Mapping Tips

Arrows show direction of information flow. Employee A receives information from sources E and F (can be people, documents, etc.). Employee A gives information to sources B and D. Employee A gives and receives information from source C.

Sample Employee A:

Wiki

What	A web communication and collaboration tool where users can create/capture knowledge and information. It is a platform which allows any authorized individual or team to edit subject material, add comments, or provide additional content.
Why	- It is a flexible multimedia knowledge management tool that makes information easier to capture, find, consume, and update. - Encourages knowledge sharing around topics - Contextual search capabilities allow users to not only find information, but *relevant* information.
When	- Documents, processes, etc. need to be stored in one central repository and readily accessible by multiple users while avoiding constraints posed by shared network drive access. - Knowledge needs to be captured and/or disseminated, particularly if it is updated frequently. - Ability for any staff member to publish knowledge easily and have that information stored in a centralized database. - Topics or concepts are expected to evolve and expand, and eventually serve as a permanent knowledge base.
How	Determine what knowledge needs to be captured or shared. Develop structure/outline/categories for that information. Establish posting parameters following accepted wiki conventions. Familiarize all users with CT Wiki environment.
Do's & Don'ts	- Encourage staff to embrace platform and participate in a collaborative process of knowledge construction - Ensure there is a logical structure to the respective subject areas/topics. - Avoid information becoming disorganized - Be cognizant of inaccurate information being posted.
Generic Example	Wikipedia is the most well-known wiki. This encyclopedia on the web is written by those who visit the site, with contributors on almost every topic imaginable.
Caltrans Examples	Caltrans IT uses wiki pages to share information on various techniques, such as database administration.
Helpful Links / Resources	Caltrans Wiki Main Page MediaWiki Handbook

CATEGORY – ROTATIONAL PROGRAMS

JOB ROTATION

What	A formal program in which a person or group of persons experiences a variety of tasks and responsibilities in several different positions. Typically designed to develop an individual's knowledge base to prepare him or her for positions of increasing responsibility and scope.
Why	• Can develop a pool of qualified applicants for positions of increasing responsibility and scope • Decreases the impact of "brain drain" when individuals leave key positions
When	• Career development requires knowledge and experience in several different areas or programs • On the job experience is the most effective method of knowledge transfer
How	Determine what knowledge needs to be shared. Develop formal program that assures individuals will experience full variety of identified knowledge and tasks. Clarify requirements for successful completion of program.
Do's & Don'ts	• Program should have clearly defined requirements for acceptance and successful completion • Program purpose and goals should be clearly communicated to all potential participants • Program should be available to all who qualify for acceptance • Employees exempt from program should be minimized • Staff located at the place of rotation need to be prepared for the new person temporarily coming in, as well as those at the person's former location so the transitioning is as smooth as possible.
Generic Examples	Areas that might use a job rotation program include: DHR management team; Agency management teams; Expert IT programming positions
Caltrans Examples	The Division of Labor Relations swapped Unit Managers in their Drug and Labor Units. The Department's Chief Engineer rotated the Project Delivery Division Chiefs several years ago. All Division chiefs rotated jobs for 6 months or more. As a result, valuable cross training occurred and some of these Division Chiefs stayed in their new assignments. Rotation also occurred in DES at the Deputy level a few years ago. The Executive Development Program (EDP) that ended in June 2010 included a job rotation component. Several of the participants were promoted.
Helpful Links / Resources	Division of Transportation Planning – Rotation Program Homepage

A C K N O W L E D G E M E N T

Strategic Priority "Informed and Engaged Workforce": Develop and maintain an informed and engaged workforce that is empowered to effectively deliver our promised projects and programs.

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